BP-A552_Information on the Vaccine-Hepitis B Vaccine

The Disease

Hepatitis B virus (HBV) is one of causes of viral hepatitis (inflammation of the liver). Most people infected with HBV recover completely and no longer infectious with recovery, but approximately 5-10% become chronic carriers of HBV infection, and 1-2% have severe life threatening hepatitis. Chronic HBV carriers may have no symptoms and appear well, yet can transmit the virus to others. HBV may be eliminated from the body spontaneously, but many times persists for a person's lifetime. Infection with HBV for 20-30 years can result in cirrhosis of the liver and is strongly associated with liver cancer.

HBV is transmitted by contact with blood and other body fluids including semen and vaginal secretions, most commonly through sharing injection drug use equipment or through sexual intercourse. Health workers and correctional officers are at high risk of acquiring HBV infection because of frequent contact with blood or potentially infectious body fluids and, therefore, vaccine is recommended to prevent infection.

The Vaccine

Hepatitis B Vaccine [Recombinant] is a noninfectious Recombinant DNA Hepatitis B Vaccine. After three doses of vaccine the majority of healthy adults are protected from future infection and do not require booster vaccinations.

Persons with impaired immunity or with kidney failure on dialysis have poorer antibody response to vaccination.

Dosing Schedules

Three doses of Hepatitis B Vaccine are needed to confer maximal protection. The vaccine is usually administered at 0, 1, and 6 months. Employees who fall behind in receiving scheduled vaccine doses, should notify BOP health services staff to obtain the missed dose(s) as soon as possible. It is usually not necessary to restart the series when doses are not administered on schedule. Antibody titers to HBV can be measured 1-2 months after the third dose of vaccine to determine if antibody levels are protective. Measuring antibody levels more than 6 months after the third vaccine dose is not clinically useful. If antibody levels are subtherapeutic, revaccination with three doses of vaccine at 0, 1, and 6 months is indicated. If antibody levels remain subtherapeutic, any additional vaccinations are not useful and the employee is considered susceptible to future HBV.

Adverse Reactions

Hepatitis B Vaccine [Recombinant] is generally well tolerated. During clinical studies involving thousands of individuals distributed over all age groups, no serious adverse reactions attributable to vaccine administration were reported. As with any vaccine, however, it is possible that expanded commercial use of the vaccine could reveal rare adverse reactions not observed in clinical studies. The most frequently reported adverse reactions were injection-site soreness, fatigue, induration, erythema, swelling, fever, headache, and dizziness. Other more serious adverse reactions have occurred infrequently. If you have any questions about Hepatitis B or vaccination, please ask.

Contraindications

Hypersensitivity to yeast or any other component of the vaccine is a contraindication for use of the vaccine.

Warnings

Patients experiencing hypersensitivity after a Hepatitis B Vaccine [Recombinant] injection should not receive further injections. HBV infection has an average incubation period of 70 days. Hepatitis B Vaccination may not prevent HBV infection in persons with unrecognized HBV infection at the time of vaccine administration. Additionally, small percentage of healthy people do not respond to the vaccine and do not develop immunity to HBV.

Pregnancy

Based on limited data, hepatitis B vaccine contains no components that have shown to pose a risk to the fetus or newborn. Pregnancy should not be considered a contraindication to vaccination for women at high risk of acquiring hepatitis B viral (HBV) infection, since HBV poses a significant risk to the fetus or newborn. Pregnant women of women or childbearing age who may be pregnant should discuss hepatitis B vaccination with their physician.

Approval from Physician

Yes No	Approved for Vaccination	
Physician's Signature		Date

This Form Replaces BP-552.061 of Oct 95